

AMENDMENTS TO THE CLAIMS

(IN FORMAT COMPLIANT WITH THE REVISED 37 CFR 1.121)

1. (PREVIOUSLY PRESENTED) A method of bridging an incoming packet from a first network to a second network, the method comprising the steps of:

(A) reading a pointer for a first parameter within said incoming packet;

(B) processing said first parameter in accordance with said pointer to produce a second parameter; and

(C) presenting an outgoing packet containing said second parameter for said second network.

2. (CURRENTLY AMENDED) The method according to claim 1, further comprising the steps of:

reading a length and an offset for said first parameter from a database storing said pointer; and

partitioning said incoming packet in accordance with said offset and said length to extract said first parameter ~~prior to processing~~.

3. (CURRENTLY AMENDED) The method according to claim 2, further comprising the step of downloading all of said offset, said length, and said pointer into said database prior to reading.

4. (CURRENTLY AMENDED) The method according to claim 1, further comprising the steps of:

routing said first parameter to at least one of a plurality of peripheral blocks identified by said pointer ~~prior to~~
5 ~~processing~~, wherein said peripheral blocks perform said processing;
and

assembling said second parameter into said outgoing packet ~~in response to processing~~.

5. (CURRENTLY AMENDED) The method according to claim 4, further comprising the step of reading a second offset and a second length for a second network protocol from a database prior to assembling said outgoing packet.

6. (CURRENTLY AMENDED) The method according to claim 4, further comprising the step of routing said first parameter to an external peripheral block identified by said pointer ~~prior to~~
5 ~~processing~~, wherein said external peripheral block performs said
processing.

7. (ORIGINAL) The method according to claim 1, wherein step (B) is at least two processes of a content addressable memory process, a time to live process, a comparison process, a counter

process, a value swapping process, a stuffing process, a de-
5 stuffing process, a cyclic redundancy checksum process, a parity
process, a first-in-first-out process, a length construction
generator process, a header error control synchronization process,
a frame relay lookup process, a data link connection identifier
process, a protocol identification analysis process, a point-to-
10 point protocol verification process, a parameter discard process,
and a buffer process.

8. (PREVIOUSLY PRESENTED) The method according to claim
1, wherein step (B) comprises the sub-step of simultaneously
processing a plurality of parameters within said incoming packet.

9. (ORIGINAL) The method according to claim 1, wherein
step (B) is non-programmable.

10. (CURRENTLY AMENDED) The method according to claim 1,
further comprising the step of delineating a receive frame from
said first network to produce said incoming packet ~~prior to~~
~~processing~~.

11. (CURRENTLY AMENDED) The method according to claim
10, further comprising the step of selecting among a plurality of

frame delineation methods for a plurality of network protocols ~~prior to delineating~~ to delineate said receive frame.

12. (CURRENTLY AMENDED) The method according to claim ~~10~~ 1, further comprising the step of delineating a ~~second~~ receive frame from said second network to produce ~~said~~ a second incoming packet.

13. (CURRENTLY AMENDED) The method according to claim 1, further comprising the step of framing said outgoing packet to produce a transmit frame for said second network ~~in response to presenting said outgoing packet.~~

14. (CURRENTLY AMENDED) The method according to claim 13, further comprising the step of selecting among a plurality of framing methods for a plurality of network protocols ~~prior to framing~~ to frame said outgoing packet.

15. (CURRENTLY AMENDED) The method according to claim ~~14~~ 12, further comprising the step of framing ~~said output~~ a second outgoing packet generated from said second incoming packet to produce a second transmit frame for said first network ~~in response to presenting said outgoing packet.~~

16. (ORIGINAL) A circuit comprising:

means for reading a pointer for a first parameter within
an incoming packet compliant with a network protocol;

5 means for processing said first parameter in accordance
with said pointer to produce a second parameter; and

means for presenting an outgoing packet containing said
second parameter.

17. (CURRENTLY AMENDED) The circuit according to claim
16, wherein said means for processing comprises means for
partitioning said incoming packet, and said circuit further
comprises a database configured to store said pointer.

18. (CURRENTLY AMENDED) The circuit according to claim
17, wherein said means for processing further comprises a plurality
of peripheral means, at least one of said peripheral means (i)
linked to said pointer and (ii) configured to perform a process
5 involving said first parameter.

19. (CURRENTLY AMENDED) The circuit according to claim
18, wherein said plurality of peripheral means comprises a first
plurality of said peripheral means internal to said means for
processing and a second plurality of said peripheral means external
5 to said means for processing, wherein each of said peripheral means

is configured to perform a different operation on said incoming packet.

20. (PREVIOUSLY PRESENTED) The circuit according to claim 19, further comprising means for interfacing to said first network configured to de-frame in compliance with a plurality of network protocols.